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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/433,730	11/03/1999	STEVEN T. JAFFE	33754/JWE/B6	2909

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EXAMINER

TSE, YOUNG TOI

ART UNIT PAPER NUMBER

2634

DATE MAILED: 01/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/433,730

Applicant(s)

Jaffe et al.

Examiner

Young Tse

Art Unit

2634



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Jan 11, 2002

2a) ☐ This action is FINAL.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 10 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 10 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☒ The proposed drawing correction filed on Jan 11, 2002 is: a) ☒ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 19

20) ☐ Other: _____

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DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on Jan 11, 2002 have been approved.

Specification

2. The disclosure is objected to because of the following informalities: on page 21, line 9, Applicants are requested to update the Serial No. 09/303,783, now U.S. Patent No. 6,219,088; page 27 to page 29, the numerals "50", "52", "54", "56", and "62" should be changed to --18--, --20--, --22--, --28--, and --26--, respectively, see the changes in the proposed drawing correction of Figs. 4 and 9. Appropriate correction is required.

Claim Objections

3. Claim 10 is objected to because of the following informalities: in claim 10, line 12, the word --same-- should be deleted.

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Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

5. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Eyuboglu.

Eyuboglu (U.S. Patent No. 4,745,625) discloses a receiver circuit (29) in Fig. 1 which includes three tracking loops. The first tracking loop includes a multiplier (40) and a carrier recovery (42) for acquiring carrier frequency lock of a predetermined frequency component X_k . The second tracking loop includes a linear equalizer (38), the multiplier (40), and a weight update circuit (46) in operative response to the predetermined frequency component X_k . The third tracking loop includes a sampler A/D converter (34) and a timing recovery circuit (36) for providing a symbol timing parameter or a timing recovery signal in operative response to the predetermined frequency component X_k .

6. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Tsui et al..

Tsui et al. (U.S. Patent No. 6,278,730) discloses a receiver circuit (106) in Fig. 2A which includes three tracking loops. The first tracking loop includes a tuning/down conversion circuit (208), a sampling rate circuit (210), an adaptive equalizer (214), a symbol decision circuit (216),

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and a carrier recovery (222) for acquiring carrier frequency lock of a predetermined frequency component from a front end receiver circuit (202, 204, and 206). The second tracking loop includes the adaptive equalizer (214), the symbol decision circuit (216), and an equalizer weight update circuit (220) in operative response to the predetermined frequency component. The third tracking loop includes the sampling circuit (210) and a baud timing recovery circuit (212) for providing a symbol timing parameter or a timing recovery signal in operative response to the predetermined frequency component.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

References Chalmers and Farrow et al. Are related to a receiver circuit including a carrier recovery circuit and a timing recovery circuit for controlling the carrier frequency and the sampling rate of the receiver circuit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Young Tse** whose telephone number is **(703) 305-4736**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Stephen Chin**, can be reached at **(703) 305-4714**.

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Any response to this action should be mailed to:

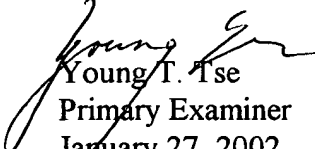
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or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.


Young T. Tse
Primary Examiner
January 27, 2002